



Success Story
Intel® Software Partner Program
Multi-core technology



"Thanks to Intel technology, we are able to satisfy demands on our software that at first did not seem possible. This enables us to respond even more effectively to the needs of our international customers."

- Dušan Peterc, Manager, Arahne

Challenge:

The performance of traditional processors represented a bottleneck for ArahWeave, a leading textile design software program, despite ongoing program improvements.

Solution:

Thanks to parallel programming, optimisation for multi-core processors and the use of the Intel® C Compiler, Arahne was able to increase the performance of its leading software by a factor of up to 3.5.

Learn more:

www.intel.com/partner
www.arahne.si

Multiple threads and a strong partner

Arahne deploys parallel programming and the Intel® Software Partner Program

"Computer-aided design is today one of the cornerstones of the international textile industry. The demands on the programs in terms of speed, function and flexibility are constantly growing. Since Arahne was founded, we have therefore been continuously striving to optimise the performance of our software. Multi-threading technology, coupled with support from the Intel Software Partner Program, has become a crucial success factor for us in this context," Dušan Peterc, Manager of Arahne.

Slovenian innovative strength for the whole world

Arahne, a specialist in textile design software development, supports fabric designers and weavers as they endeavour to manage three key challenges: effective-as-possible communication with their customers through fabric simulations, shortened product launch times and the prevention of production problems.

The Slovenian company's chief product is ArahWeave, a market-leading application for the design of dobby and jacquard fabrics. ArahWeave covers the entire production process, from the creation using Computer-Aided Design (CAD) right through to production. The software's particular features also include the option of merging various pattern samples in a single file and producing the design on an ongoing basis – i.e. without stopping the loom. It is also possible to convert an image into a weavable design without first having to edit it. Users of ArahWeave can thus quickly and inexpensively manufacture a range of pattern samples at the same time for their customers. They can also produce single pieces with industrial methods. The software also supports fabric simulation and the preparation of technical documentation for production and loom threading.

Users of ArahWeave include international weaving mills who design fabrics for world-famous brands and are constantly obliged to work under time and cost pressure. The all-in-one solution is also used in training institutions such as textile colleges and universities by both designers and technical staff.



"The global successes of Arahne as an SME-sector company in Slovenia once again illustrate that "small is beautiful". We are delighted by Arahne's membership of the Intel Software Partner Program, and we are striving to help our innovative partner achieve even greater international recognition through technology and marketing support."

– Andrei Mazanov, EMEA Director Intel® Software Partner Program

Many years of success supported by Intel technology

Computer-aided fabric design makes very high demands on the software used. Arahne has therefore always set particular store by constantly developing its solution in line with the latest technologies. Even back in 1993, the company began programming with Intel® processors. Since this time, Arahne has stayed with the market-leading technology. Today, the software company uses Intel® quad-core processors with 2 GB RAM, a hard drive capacity of 500 GB and 30-inch monitors with a resolution of 2,560 x 1,600 dpi plus graphics cards with 320 MB RAM. This hardware allows Arahne to develop designs in ultra-realistic resolutions of up to 32,000 x 32,000 pixels.

The calculation of natural-looking fabric simulations in particular demands high performance from the processor. By optimising ArahWeave's rendering function for Intel dual- and quad-core processors, Arahne has been able to increase the speed of its software by two, even three-and-a-half times. "The results were so impressive that we have convinced 60 per cent of our customers to upgrade their computer to a dual-core, since the benefits were so easy to demonstrate," says Dušan Peterc, Manager of Arahne. In the summer of 2007, developers also switched from the GCC compiler they had used in the past to the Intel C Compiler, which brought about a further improvement in performance of 15 per cent. The significantly enhanced processor performance facilitates the simulation of particular fabric properties such as fil-coupe, raised finish, overprint, ikat, wrinkle or

seersucker. The majority of working steps can also now be designed completely interactively, whereas previously they had to be interrupted time and again for confirmations or recalculations.

Communicating success through co-marketing

As well as the use of technical tools, Arahne also took up the marketing services support that Intel offers its program partners. Never reticent to seize an opportunity, the company has been using the Intel Software Partner logo and the "Runs great on Core™ 2 Duo" logo on its brochures since September. To create further co-branded marketing materials, Arahne also availed itself of the Intel® Collateral Builder, an easy-to-use online tool. "Our customers, based in some 30 countries, work for the most renowned international labels. They therefore are delighted to see our partnership with one of the world's leading IT companies and understand it as an additional seal of quality for the performance of our software," says Dušan Peterc.

A further advantage for Arahne, as a Partner Program member, was a financial contribution from Intel that helped Arahne take part in the ITMA (International Textile Machine Exhibition) event in 2007. The demonstration of ArahWeave on computers featuring the latest Intel quad-core processors impressed the trade public and once again spotlighted the promising partnership between two innovative companies.

About the Intel® Software Partner Program

The Intel® Software Partner Program provides a framework for collaborative solution development around Intel architecture. From business planning and product development to marketing and sales, the programme drives increased business success and market opportunities.

Success Story by:

